

APPLICANT(S): VOGTMEIER ET AL.

SERIAL NO.: 10/573,743

FILED: October 16, 2006

Page 2

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. (Currently Amended) An X-ray unit comprising at least a first arrangement (2) for the contactless and X-ray-free measurement of first data of an object (1), the first data comprising at least one thickness measurement of the object, said at least one thickness measurement of the object derived from a measured distance to at least two positions on the surface of the object, a second arrangement (4) for measuring X-ray data of the object (1) using X-rays, and a control unit (3) that is provided for controlling the second arrangement (4) as a function of the first data, wherein at least one of intensity and mean energy of the X-rays is controlled by the control unit (3) based at least in part on the first data.
2. (Currently Amended) An X-ray unit as claimed in claim 1, wherein the first arrangement is comprises a plurality of distance measuring units spatially distributed that are stationary with respect to the object, and wherein the second arrangement rotates with respect to the object.
3. (Currently amended) An X-ray unit as claimed in claim 1, wherein the first arrangement (2) comprises a transmitter (2¹) for transmitting light or sound and a receiver (2²) for receiving the reflected light or sound.
4. (Currently amended) An X-ray unit as claimed in claim 1, wherein the first data are geometry data of the object (1).
5. (Currently Amended) An X-ray unit as claimed in claim 1, An X-ray unit comprising at least a first arrangement (2) for the contactless and X-ray-free measurement of first data of an object (1), a second arrangement (4) for measuring X-ray data of the object (1) using X-rays, and a control unit (3) that is provided for controlling the second arrangement (4) as a function of the first data, wherein at least one of intensity and mean energy of the X-rays is controlled by the control unit (3) based at least in part on the first data, and wherein the first arrangement (2) is designed to measure measures the first data by triangulation.
6. (Currently amended) An X-ray unit as claimed in claim 1, wherein the first arrangement (2) has a measuring unit (2.1) that rotates designed to rotate around the object (1).

APPLICANT(S): VOGTMEIER ET AL.

SERIAL NO.: 10/573,743

FILED: October 16, 2006

Page 3

7. (Cancelled)

8. (Currently Amended) An X-ray unit as claimed in claim 1, wherein the second arrangement (4) has an X-ray source (2) that rotates designed to rotate around the object (1), and wherein at least one of intensity and mean energy of the X-rays is controlled by the control unit (3) based at least in part on the first data.

9. (Currently amended) An X-ray unit as claimed in claim 1, wherein the X-ray unit comprises a processor unit (10) that is intended to convert data (D) measured in the first arrangement (2) into geometry data (D').

10. (Currently Amended) A method of measuring X-ray data of an object (1) that comprises the following steps:

measuring of first data of the object (1), the first data comprising at least one thickness measurement of the object, said at least one thickness measurement of the object derived from a measured distance from a first arrangement by means of a contactless and X-ray-free method that is stationary with respect to measurement of first data of the object to at least two positions on the surface of the object.

obtaining X-ray data of the object (1) by means of X-rays from an emitter that rotates with respect to the object, and

controlling the measurement of the X-ray data as a function of the first data, wherein at least one of intensity and mean energy of the X-rays is controlled based at least in part on the first data.

11. (Currently Amended) A method according to claim 10 in which the step of measuring the first data of is accomplished by means of sound or light, whereby as an intermediate step in the measurement step the light or sound is reflected by a reflection-optimizing means (11) that is provided on the object (1).

12. (Previously presented) The method of claim 10, further comprising determining the first data by triangulation.

13. (Cancelled)

APPLICANT(S): VOGTMEIER ET AL.

SERIAL NO.: 10/573,743

FILED: October 16, 2006

Page 4

14. (Previously Presented) The method of claim 10, further comprising determining a geometry of the object from the first data.

15. (Previously Presented) The method of claim 10, further comprising determining the geometry of the object based on the first data and a geometry of a support structure for the object.